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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,507	10/08/1999	RYUICHI SHIOHARA	Q56144	3387

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EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,507

Applicant(s)

SHIOHARA ET AL.

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/11/2005 & 5/11/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground of rejection, which primarily relies on other process (initiated by computer 200 instead of camera 100) disclosed by the same reference to Aizawa et al.

In addition to the new ground of rejection, the Examiner also would like to address the Applicant's arguments. The Applicant asserts that Aizawa fails to teach or suggest "waiting for a program transmitting command from an external recording medium, wherein the program transmitting command is the first communication between the digital camera and the external recording medium;" The Applicant further concludes that the process shown in Fig. 4 of Aizawa is opposite to the claimed arrangement, wherein the first communication is from the external recording medium to the camera.

In response, the Examiner respectfully points out **Fig. 3 and col. 5, line 10 – col. 6, line 11**, wherein the installation process is controlled by the personal computer 200 and that the first communication between the computer and the camera is the command initiated by the computer 200 using the installation program 206 located in the computer memory 205 in response to input instruction by a user through a keyboard or a mouse. This mode is another method different from the method shown in Fig. 4 which uses the installation program 120 stored in the camera to initiate the installation process through operation of button 117 from camera side. Detailed analysis is provided in the following sections.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 5/11/2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 9-12, 19-27, 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Aizawa et al (US 6,452,629).

Regarding claim 1, Aizawa discloses a function appending method for a digital camera (digital camera 100; Fig. 1) which records image data by converting an image pickup light photoelectronically, comprising:

waiting (before step S305; Fig. 3) for a program transmitting command from an external recording medium (computer 200), wherein the program transmitting command is the first communication between the digital camera and the external recording medium (see Fig. 4; col. 5,

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lines 10-42, wherein the digital camera 100 waits until step S305 for a first transmitting command sent from the computer 200 to the camera 100. It is noted that the first command is also a program transmitting command since it directly relates to program transmission);

receiving (step S305) the program transmitting command from the external recording medium;

transmitting a request-to-send program command (between steps S305 and S306) to the external recording medium (col. 5, lines 36-49, wherein configuration mode of the camera is transmitted to the computer as a request-to-send command to allow the computer to compare with the current version of external program set in steps S306-S309);

receiving (step S312) a program recorded on the external recording medium connected to the digital camera exchangeably (col. 6, lines 6-11);

storing the program into a recording medium (EEPROM 112 of the camera 100) provided in the digital camera, and reading the program from the recording medium in the digital camera at a desired time (decided by the user); and executing the program (col. 6, lines 53-54 and col. 10, lines 30-49, wherein the external program 207 has been installed in the EEPROM 112 but not necessarily be read out and executed until the user decides to do so, i.e., during photographing session).

It should be noted that another interpretation may be applied to the Applicant's claimed invention by interpreting inherent *handshaking* protocol of serial communication (col. 5, lines 42-43) during the communication between the computer 200 and camera 100 wherein the computer acts as a master device while the camera is a slave device.

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Regarding claim 2, see the analysis of claim 1.

Regarding claims 9 & 10, it is clear that the program can be stored in EEPROM 112, RAM 107, or recording medium 109 (col. 6, lines 53-54; col. 7, lines 1-4 and col. 10, lines 41-49), where captured images are also stored therein (col. 4, lines 62-67).

Regarding claims 11 & 12, see the analysis of claim 1, wherein “external program reception means” is indicated by external connector 116 in combination with communication protocol between the camera and the computer and camera’s CPU 111. See Fig. 1.

Regarding claims 19 & 20, see the analyses of claims 9 & 10.

Regarding claims 21-24, Aizawa also discloses that the recording medium can be a non-volatile memory card which encompasses a flash memory. See col. 11, lines 5-9.

Regarding claims 25 & 26, it is also clear that the communication line (the cable line 115) is external to the digital camera and connected to an external device (200) as shown in Fig. 1.

Regarding claim 27, Aizawa shows in Fig. 1 that the external device is a personal computer (200).

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Regarding claims 29-31, see the analyses of claims 25-27, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-8, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al (US 6,452,629) in view of Ogawa Yasuyuki (JP 09-046577).

Regarding claims 13 & 15, Aizawa does not explicitly teach program deleting means for *deleting* a desired program from the recording medium as required in claim 13 and that the program is program for generating print image data and print data transmitting means for transmitting the print image data generated by executing the program to a printing device as required in claim 15.

Ogawa teaches an image pickup equipment (40) that downloads a printing driver program from an external device (41). It becomes possible to perform direct printing of image to the printer from the image pickup equipment by sending the captured image to a printer (42) using the downloaded printing driver program (see Figs. 1 & 4; page 3, paragraph [0023]). In addition, Ogawa also suggests that an **elimination** of the downloaded program in the camera is possible (see paragraph [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art to recognize the advantageous teachings of Ogawa to improve the digital camera system in Aizawa by including a printing driver program that is available for downloading from an external device to the camera for printing execution so that direct printing of image to the printer from the camera becomes possible. Furthermore, such a printer driver program would be deleted at any time to save memory space.

Regarding claims 3-6, 14 & 16, see the analyses of claims 13 & 15.

Regarding claim 17, also see the analysis of claim 15 for the communication program being *a printing driver program* for the camera to communicate with the printer. Although the communication between the camera and the printer taught by Ogawa is a wireless communication program instead of a wired communication program, an Official Notice is taken that it is well known in the art that communication *between a camera and a printer* can be configured in either wired or wireless fashion. Therefore, it would have been obvious to one of ordinary skill in the art to configure the camera to communicate with a printer through communication line utilizing a corresponding printing driver program as an alternative configuration over the wireless configuration.

Regarding claims 7, 8 & 18, see the analysis of claim 17.

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5. Claims 28 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al (US 6,452,629) in view of Steinberg et al (US 6,006,039).

Regarding claims 28 & 32, Aizawa does not explicitly disclose that the external device comprises a modem. However, as taught by Steinberg, the communication port of a digital camera can be a serial port or a modem (either wireless or wired modem 20) for transferring data between the digital camera and a personal computer or other device, which also includes a modem. See Fig. 1; col. 3, line 65 – col. 4, line 15.

Therefore, it would have been obvious to one of ordinary skill in the art to either implement a serial port or a modem connection between the camera and a modem (i.e., a network modem or a modem of computer) for transferring data between the camera and the computer or other devices as suggested by Steinberg.

Note that both serial port and modem must need a handshaking protocol to establish communication between the digital camera and the computer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER